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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,487	10/27/2003	Hideki Komatsuda	105193.07	3126
25944	7590	08/26/2004	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			FULLER, RODNEY EVAN	
			ART UNIT	PAPER NUMBER
			2851	

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/693,487

Applicant(s)

KOMATSUDA, HIDEKI

Examiner

Rodney E Fuller

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 56-96 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 56-96 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

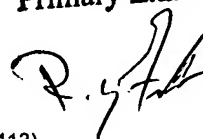
- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/259,137.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Rodney Fuller  
Primary Examiner

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/27/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Remarks***

The current application is Continuation of Application No. 10/090,731. Pending claims 56-95 are from the parent application and claim 96 has been added. Thus, claims 56-96 are pending. The applicant has requested an interference be declared between this application and U.S. Patent No. 6,198,793, from which the pending claims correspond.

In the parent application, claims 56-95 were objected to because the applicant initially failed to specifically apply each limitation or element of the claims to the disclosure. (Office Action mailed January 14, 2003). Subsequently, the applicant provided a chart comparing the pending claims to the description in applicant's application. (Response dated February 13, 2003). In an Office Action mailed April 25, 2003, the examiner acknowledged the supplied chart and withdrew the Claim Objection set forth in the Office Action mailed January 14, 2003. However, the examiner compared the claims with the description of the application indicated by the applicant. The examiner found that some the structures set forth in the claims were not found in the indicated sections of the description.

Thus, the rejection set forth in the Office Action mailed April 25, 2003 is repeated below.

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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2. Claims 56-96 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 56 and 96, after review of the cited sections, the examiner maintains that the claimed limitation of “whereby said optical element images said secondary light source in an exit pupil of the illumination system” is not disclosed.

Regarding claim 56, after review of the cited sections, the examiner maintains that the claimed limitation of “said raster element of said mirror or lens is shaped and arranged in such a way that an image of said raster element covers a major portion of said reticle plane” is not disclosed. (Emphasis added)

Regarding claim 56, after review of the cited sections, the examiner maintains that the claimed limitation of “said pupil is defined by an aperture and a filling ratio” is not disclosed.

Regarding claim 64, after review of the cited sections, the examiner maintains that the claimed limitation of “a second mirror or lens with a multiple number of pupil honeycombs” is not disclosed.

Regarding claim 66, after review of the cited sections, the examiner maintains that the claimed limitation of “wherein said pupil honeycombs are arranged on said second mirror or lens in such a way that their images... illuminate said exit pupil with a predetermined pattern” is not disclosed.

Regarding claim 75, after review of the cited sections, the examiner maintains that the claimed limitation of “wherein said raster element of said mirror is tilted relative to an enveloping or bearing surface” is not disclosed. (Emphasis added)

Regarding claim 77, after review of the cited sections, the examiner maintains that the claimed limitation of “wherein said mirror device has an outer axial course of a light bundle that is free of vignetting” is not disclosed.

Regarding claim 78, after review of the cited sections, the examiner maintains that the claimed limitation of “wherein the illumination system has a field that is a rectangular field or an annular segment” is not disclosed. (Emphasis added)

Regarding claim 79, after review of the cited sections, the examiner maintains that the claimed limitation of “an optical element that has a function selected from the group consisting of imaging a secondary light source in an entrance pupil of a subsequent projection objective, remodeling a pre-given rectangular illumination by raster elements to form a field in a form of an annular segment, adjusting an intensity distribution over said field, and mixtures thereof” is not disclosed. (Emphasis added)

Regarding claim 80, after review of the cited sections, the examiner maintains that the claimed limitation of “an accessible diaphragm plane” is not disclosed.

Regarding claim 87, after review of the cited sections, the examiner maintains that the claimed limitations of “arranging said raster element of second mirror or lens to a position at said secondary light source;” “shaping said raster element of said second mirror or lens such that its form corresponds to that of said secondary light source;” “selecting an angle of deflection of a prismatic component of said raster elements of said

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first or second lens;” “said raster element of said first mirror or lens is imaged in said reticule plane by said raster element of second mirror or lens;” and “said secondary light source is imaged in an exit pupil of said optical element” are not disclosed.

Regarding claim 95, after review of the cited sections, the examiner maintains that the claimed limitation of “comprising an illumination intensity at said light sensitive object, with an unstructured mask, that has no position dependent differences” is not disclosed. (Emphasis added)

Claims 57-86 and 88-95 depend from claim 56 and therefore include the deficiencies of claim 56.

### ***Conclusion***

3. This is a continuation of applicant's earlier Application No. 10/090,731. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however,

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event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney E Fuller whose telephone number is 571-272-2118. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rodney E Fuller  
Primary Examiner  
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August 18, 2004